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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/037,669

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01/22/2009

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EXAMINER

NGUYEN, STEVEN H D

ART UNIT

PAPER NUMBER

2419

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/037,669		<b>Applicant(s)</b> FEUERSTRAETER ET AL.	
	<b>Examiner</b> Steven HD Nguyen		<b>Art Unit</b> 2419	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1) ☒ Responsive to communication(s) filed on 11/28/09.

2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4) ☒ Claim(s) 59-68 is/are pending in the application.

    4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.

6) ☒ Claim(s) 59-68 is/are rejected.

7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.

8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) ☐ All    b) ☐ Some \*    c) ☐ None of:

1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) ☐ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
    Paper No(s)/Mail Date \_\_\_\_\_.

4) ☐ Interview Summary (PTO-413)  
    Paper No(s)/Mail Date \_\_\_\_\_.

5) ☐ Notice of Informal Patent Application

6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 11/26/2008 has been entered.

### ***Claim Objections***

2. Claims 59 and 64 objected to because of the following informalities: Line 15, "the link device" should be changed to -- the first link device --. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claims 59-61 and 64-66 rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

5. As claims 59 and 64, the specification does not disclose a method and system for generating a control message which includes a priority level or not based on the received information at the first node as stated in lines 2-9, "determine . . . multiple priority levels".

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claims 62-63 and 67-68 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

8. Claims 62 and 67 recites the limitation "the second device" in line 9. There is insufficient antecedent basis for this limitation in the claims.

### *Claim Rejections - 35 USC § 103*

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 59-68 rejected under 35 U.S.C. 103(a) as being unpatentable over Williams in view of Lee.

As claims 59-61 and 64-66, Williams discloses an apparatus, comprising logic to determine, based on data received from a first linked device, whether to apply flow control to an Ethernet link in accordance with either (1) a Xon/Xoff protocol that enables/disables a Ethernet communication link or (2) a priority based flow control protocol that selectively enables/disables

transmission of Ethernet frames based on a priority level; if it is determined to apply the priority based flow control protocol that selectively enables/disables transmission of Ethernet frames to the first linked device based on the priority level (Figs 3-4 which is a pause frame of legacy protocol and new protocol for flow control in the Ethernet network based on the congest level of the priority queue, Fig 6); receive a single Ethernet control frame from the first linked device, the single received Ethernet control frame comprising data identifying the received Ethernet frame as a control frame, data identifying priority level of Ethernet traffic to apply flow control to, and data identifying at least one time duration to apply flow control to the identified priority level of Ethernet traffic (Fig 4 which is control frame which used to apply a flow control to the traffic based on the parameter and priority and Fig 5, Ref 550); and in response to the received Ethernet control frame from the linked device, ceasing transmission of Ethernet frames associated with the priority level identified by the received Ethernet control frame for a time period based on the data identifying at least one time duration to apply flow control to the identified priority level of Ethernet traffic included in the received Ethernet control frame (Fig 5, Ref 560); and automatically resuming transmission of Ethernet frames associated with the priority level identified by the received Ethernet control frame after a time period based on the data identifying at least one time duration to apply flow control to the identified priority level of Ethernet traffic included in the received Ethernet control frame (Fig 5, Ref 570 for resuming transmission after a duration); determine priority level of Ethernet traffic for a second linked device to apply flow control to; and constructing and transmitting a single Ethernet control frame to the second linked device, the single transmitted Ethernet control frame comprising data identifying the transmitted Ethernet frame as a control frame, data identifying priority level of Ethernet traffic to apply flow

control to at the second linked device, and data identifying at least one time duration for the second linked device to apply flow control to the priority level of Ethernet traffic identified by the transmitted Ethernet control frame (Fig 4 discloses a system for detecting a congestion, generating a pause message for transmitting to the sender, wherein the message includes a priority level and a duration. The senders stops at least some traffics according to the indication in the message and resuming the transmission after the duration or receiving another pause frame with the value of duration being zero and Fig 3 is pause frame for legacy protocol and Fig 4 is pause frame for modifying protocol). However, Williams does not disclose a multiple priority levels. In the same of endeavor, Lee discloses a pause frame which includes the multiple priority levels that sender must apply the flow control to by access data identifying multiple priority levels to apply flow control to for different linked devices (See col. 5, lines 62 to col. 6, lines 8) and wherein multiple priority levels correspond different ones of multiple transmission queues to enqueue egress Ethernet frames (Fig 2, 7-8 and col. 5, lines 62 to col. 6, lines 8 discloses a priority levels correspond different ones of multiple transmission/receive queues to store the frames).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to apply a method and system for feedback the priority levels in the pause frame as disclosed by Lee into the teaching of Williams. The motivation would have been to prevent data loss.

As claims 62-63 and 67-68, Williams discloses an apparatus comprising logic to monitor multiple receive queues to enqueue received Ethernet frames having respective priority levels associated with respective ones of the multiple receive queues (Fig 6 is used to monitor if the

queues are in congestion or not); based on the monitoring, determine a priority level of Ethernet traffic from a linked device to apply flow control to (Fig 5, Ref 530); and constructing and transmitting a single Ethernet control frame to the linked device (Fig 5, Ref 540), the single Ethernet control frame comprising data identifying the Ethernet frame as a control frame, data identifying a priority level of Ethernet traffic to apply flow control to, and data identifying at least one time duration for the second device to apply flow control to the priority level of Ethernet traffic identified by the Ethernet control frame (Fig 4). However, Williams does not disclose a multiple priority levels. In the same of endeavor, Lee discloses a pause frame which includes the multiple priority levels that sender must apply the flow control to by access data identifying multiple priority levels to apply flow control to for different linked devices (See col. 5, lines 62 to col. 6, lines 8).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to apply a method and system for feedback the priority levels in the pause frame as disclosed by Lee into the teaching of Williams. The motivation would have been to prevent data loss.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steven HD Nguyen whose telephone number is (571)272-3159. The examiner can normally be reached on 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jayanti Patel can be reached on (571) 272-2988. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2419

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

1/22/2009

/Steven HD Nguyen/

Primary Examiner, Art Unit 2419